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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/189,768	11/10/1998	SADAYUKI NARUSAWA	51270-245585	5853

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EXAMINER

LAO, LUN S

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 03/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/189,768

Applicant(s)

NARUSAWA ET AL.

Examiner

Lun-See Lao

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### *Introduction*

1. Claims 1-20 of U.S. Application 09/189768 filed on 11/10/98 are presented for examination.

### ***Claim Objections***

2. Claims 1-2 are objected to because of the following informalities: misspelling (line 5 and line21). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by DeVitt (US PAT 5,212,733).

Regarding claim 1, DeVitt teaches that an audio device comprising:

an audio device (see col.3 lines 35-45);

a computer for creating audio data and control data for operating

the audio device (see col.3 lines 10-35); and data transmission means for linking the

audio device and the computer together to transmit data there between, where in said

computer has output means for outputting the audio data and the control data to the audio device via the data transmission means (see col.3 line 10-col.4 line 47), while said audio device further comprises a first system portion for processing audio data that are given from an audio source differed from the audio data of the computer, a second system portion for processing the audio data given from the computer, and mixing means for performing mixing for a plurality of the audio data, which are respectively processed by the first and second system portions ( see col. 4 line 48- col.5 line 16).

Regarding claim 2, Devitt discloses that an audio system comprising:

an audio device (see fig.1);

a computer for creating audio data and control data for operating the audio device; and data transmission means for linking the audio device and the computer together to transmit data there between (see col.3 line 10-35), wherein said computer has output means for outputting the audio data and the control data to the audio device via the data transmission means, while said audio device further comprises a first system portion for performing signal processing on audio data given from the computer, or for performing the signal processing on audio data of an audio source differed from the audio data of the computer or audio data selectively given from one of a plurality of audio sources differed from the computer (see col.3 line 10-col.4 line 47), a second system portion for performing simple signal processing, which is simple as compared with the signal processing of the first system portion, on the audio data given from the computer, mixing means for performing mixing for a plurality of the audio data, which are respectively processed by the first and second system portions

(see fig.5b, 110 and col.4 line 47-col.5 line 17), and means for turning off the mixing of the mixing means when the first system portion performs the signal processing selectively on the audio data of the computer(see fig 5A, 110 and col.5 lines 19-50).

Regarding claim 3, DeVitt teaches that the computer further  
Comprises a display means for displaying an operation panel for operating the audio device (see col.5 line 19-27), means for outputting the control data to the audio device via the data transmission means on the basis of operation of the operation panel (see fig.5A, B) means for receiving information regarding operation made by the audio device via the data transmission means as the control data so as to reflect it in content of the operation panel, and means for outputting the audio data to the audio device via the data transmission means (see col.5 20-50).

Regarding claim 4, DeVitt discloses that an audio system wherein the computer further comprises a display means for displaying an operation panel for operating audio device (see abstract), means for outputting the control data to the audio device via the data transmission means on the basis of operation of the operation panel (see fig. 5), B), means for receiving information regarding operation made by the audio device via the data transmission means as the control data so as to reflect it in content of the operation panel (see col.3 line 10-col.4 line 45), and means for outputting the audio data to the audio device via the data transmission means (see col.3 line 10-col.4 line 17).

Regarding claim 9, DeVitt teaches that an audio device comprising:

at least one audio source (see fig.1 1-4); an interface for inputting audio data supplied from a computer; audio processing means for processing audio data given from the audio source and the audio data given from the computer (see fig.1); mixing means for performing mixing between the audio data processed by the audio processing means and the audio data which are input thereto via the interface (see col.3 line 10-col.4 35) and speaker means for producing sound based on output of the mixing means (see fig.1 52,54).

Regarding claim 10, Devitt discloses that an audio device comprises: input means for inputting audio data supplied from an audio source differed from a computer; an interface for inputting audio data supplied from the computer (see fig.1); mixing means for performing mixing between the audio data input by the input means and the audio data which are input thereto via the interface (see col.3line 10-col.4 line 35); and speaker means for producing sound based on output of the mixing means (see fig.1 52,54).

5. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Glick (US PAT 5,283,819).

Regarding claim 11, Glick teach that a machine-readable media storing an audio control program that causes a computer to actualize an audio control system comprising:

graphical user interface means for operating the audio device, the graphical user interface means actualizing an operation to select an audio source for the audio device and an operation to perform mixing on audio

data of the selected audio source and audio data given from the computer (see col.34 lines 22-40);

means for outputting control data to the audio device on the basis of operation of the graphical user interface means (see fig.49); means for receiving information regarding operation of the audio device as the control data so as to reflect it in content of graphical user interface; and means for outputting the audio data to the audio device (see col.34 line 22-col.35 line 7).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVitt (US PAT 5,212,733) in view of Silvast (US PAT 5,524,060).

Regarding claims 5-8, DeVitt did not teach that a single serial bus cable and its interface configure an audio system wherein the data transmission means.

However, Silvast discloses that an audio system wherein the data transmission means is configured by a single serial bus cable and its interface (see fig. 5,60,57 and col.9 lines 25-35).

Therefore, it would obvious to one of ordinary skill in the art at time invention was made to modify DeVitt's to provide a visual interpretation of how a signal is being processed, to control with high resolution and accuracy, and to be able to return to successful characteristics and parameters as a starting point for new application.

8. Claims 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glick (US PAT 5,283,819) in view of Silvast (US PAT 5,524,060).

Regarding claim 12, Glick discloses that an audio system comprising:  
an audio device for producing first audio data in connection with at least one audio source (see fig.1), and a personal computer for producing second audio data and control data, wherein the audio device performs mixing between the first audio data and the second audio data, which are transmitted thereto via the serial bus means, on the basis of the control data (see col.13 lines 17-65), so that speaker means produces sound based on mixing result (see fig.5, 125-126).

On the other hand, Glick did not teach that serial bus.

However, Silvast discloses that the serial bus (see fig. 5,60,57 and col.9 lines 25-35).

Therefore, it would obvious to one of ordinary skill in the art at time invention was made, would have motivated to combine the teaching of Glick and Silvast to achieve a personal computer workstation that substantially eliminates and reduces disadvantages and limitations associated with prior electronic entertainment system, as well as providing numerous entertainment functions heretofore either not possible or very expensive to perform.



Regarding claim 13, Glick teaches that an audio system wherein the audio device further comprises selection means for selecting one of the first audio data and the second audio data, signal processing means for performing signal processing on output of the selection means (see col.13 lines 7-65),

first digital-to-analog conversion means for converting output of the signal processing means to first analog signals,

second digital-to-analog conversion means for converting the second audio data given from the personal computer to second analog signals, and

analog mixing means for performing analog mixing between the first analog signals and the second analog signals (see col.11 line 55-col.12 line 55),

whereby the speaker means produces sound based on result of the analog mixing (see fig.5).

Regarding claim 14, Glick discloses that the audio device includes the switch means for disconnecting the second digital-to-analog means from the analog mixing means when the selection means selects the second audio data (see fig.5, 324 and col.12 lines 4-55).

Regarding claim 15, Glick teaches that the audio device is comprising the selection means for selecting one of the first audio data and the second audio data, signal processing means for performing signal processing on output of the selection means (see col.13 line 9-col.14 line 10),

adjustment means for performing adjustment on the second audio data with respect to sampling parameters (see col.24 line 5-col.25 line 56),

digital mixing means for performing digital mixing between outputs of the signal processing means and output of the adjustment means, and

digital-to-analog conversion means for converting result of the digital mixing to analog signals (see col.28 line 7-col.29 line 45),

whereby the speaker means produces sound based on the analog signals (see fig.5).

Regarding claims 16-18, Glick discloses that an audio system includes the serial bus means corresponds to a universal serial bus; serial bus means corresponds to an IEEE 1394 serial bus and the audio source corresponds to a tuner or a recording media (see fig.1).

Regarding claims 19-20, Glick teaches that an audio system wherein the personal computer uses graphical user interface (GUI) for creation of the control data for controlling operation of the audio device and the signal processing corresponds to a graphic equalizer process and/or a sound field control process (see col.34 line 22-col.36 line 10).

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Silfvajt (US PAT 5,402,501) and Milne (US PAT 5,390,138) are recited to show other related the audio system utilizing personal computer.

10. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:(703) 872-9314

Art Unit: 2643

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (703) 305-2259. The examiner can normally be reached on Monday-Friday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (703) 306-0377.

Lao,Lun-See  
Patent Examiner  
US Patent and Trademark Office  
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**DUC NGUYEN**  
**PRIMARY EXAMINER**